The Impact of Previous Perinatal Loss on Subsequent Pregnancy and Parenting

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Abstract

The loss of any pregnancy through miscarriage, ectopic pregnancy, stillbirth, or neonatal death presents as a significant life crisis for any woman and has far-reaching implications into a couple's future aspirations. Planning another pregnancy after dealing with a perinatal loss is difficult and plagued by ambivalence, doubts, and insecurities. Despite this ambivalence, a majority of women do become pregnant within a year following a perinatal loss. Four recurring issues surrounding perinatal loss and subsequent pregnancy have been identified in this literature review: the effect of the grief process on the subsequent pregnancy; parental coping mechanisms during the subsequent pregnancy; replacement or vulnerable child syndrome; and parenting issues with the subsequent live-born child. Issues surrounding anxiety as a coping mechanism during a pregnancy following a perinatal loss are documented consistently in the literature; however, less is known about the impact that a loss has on parenting behaviors with subsequent children. Further research is imperative to examine these issues in more detail so that evidence-based practices can be established and updated. Health care providers are in a unique position to assist these couples in dealing with the issues that a perinatal loss may place on subsequent pregnancies. By providing a reassuring and supportive environment, women can achieve a positive pregnancy outcome with the correct tools to decrease anxiety and enhance attachment to the subsequent healthy child.

***Journal of Perinatal Education*, *11*(2), 33–40;** *parenting, perinatal education, perinatal loss, pregnancy.*

Introduction

The majority of the research literature centering on perinatal loss and the grief process was published in the

1970s and 1980s. Very little research has been published in recent years. One must look to older studies when examining trends and reviewing the literature. The last 10–20 years have brought about an increasing interest in the psychological aspects of losing a baby with much discussion on stillbirths and neonatal death and very little regarding miscarriages (Conway, 1995). Miscarriage is traditionally defined as an involuntary termination of a nonviable fetus before the age of 24 weeks, while stillbirths are characterized as the birth of a dead fetus and neonatal death as a death within the first 30 days of life (Armstrong & Hutti, 1998; Franche & Mikail, 1999). Recent statistics show that between 10%-15% of all clinically confirmed pregnancies result in a spontaneous abortion or early miscarriage while only 1%-2% result in a late pregnancy loss (Armstrong & Hutti, 1998; Franche & Mikail, 1999; Wheeler, 1994). Advancement in new technologies over the last 20 years, such as pregnancy tests and especially ultrasonography, has enabled clinicians to diagnose and follow a pregnancy at an earlier date than previously available. An increase in the use of in vitro fertilization has also raised the estimates of perinatal loss (Cote-Arsenault & Mahlangu, 1999). Therefore, clinicians now have a population of women who have received early confirmation of their pregnancy and, most importantly, are aware when a perinatal loss occurs by utilizing this same advanced technology.

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The loss of any pregnancy through miscarriage, ectopic pregnancy, stillbirth, or neonatal death is a significant event for any woman and often presents as a major crisis in her life. This life crisis comprises many losses including, but not limited to, the loss of future hopes and dreams, loss of self-esteem, loss of the anticipated parent role, loss of being pregnant, loss of prenatal medical attention, and concern over the potential loss of the ability to create another new life (Rajan, 1994). This sense of loss plus the societal taboos surrounding death

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and the nonstatus of either an unborn or a dead infant results in a couple mourning the loss of their pregnancy in silence and isolation (Carrera et al., 1998; Rajan, 1994). For many years the health care system viewed these losses as minor physical occurrences easily corrected medically and not requiring close follow up. Furthermore, up until the 1980s, very early pregnancy loss was regarded as an even less significant event than a late pregnancy loss (Beutel, Deckardt, von Rad, & Weiner, 1995). The last 10–20 years have brought about an increase in the number of studies related to the psychological effects of women experiencing perinatal loss. The profound emotional and psychological impact that this loss may have on a woman's future—including, but not limited to, the effect on subsequent pregnancies—was not taken into account (Kuller & Katz, 1994; Moulder, 1999).

Until recently little research existed on the impact of a previous perinatal loss on a subsequent pregnancy. While it is important to consider how best to support women as they deal with a perinatal loss, it is just as important to look at the effects of grieving and how best to support women and their partners with the following pregnancy. Many researchers have found that the decision to become pregnant again following a perinatal loss is plagued with doubts, insecurities, and concern that another loss may occur. Despite these ambivalent feelings, most of the research indicates that 50%-60% of these women do indeed become pregnant again within the first year after the loss has occurred (Armstrong & Hutti, 1998; Estok & Lehman, 1983; Robertson & Kavanaugh, 1998). The purpose of this paper is to explore the literature regarding pregnancy following a perinatal loss and to examine implications for practice.

Review of the Literature

For this literature review, articles were identified through a key word search of several databases including Med-

line, Cumulative Index for Nursing and Allied Health Literature (CINAHL), and the online resources of Pubmed and MedPulse. Key words used in the searches included *loss and pregnancy*, *perinatal loss and subsequent pregnancy*, *miscarriage and pregnancy*, and *pregnancy and psychological effects*. The research reviewed in the literature was undertaken primarily with Caucasian, married, middle-class women and their partners.

In reviewing the current state of the research related to pregnancy following a perinatal loss, the author identified four recurring themes: (1) the effect of the grief process on a subsequent pregnancy, (2) coping mechanisms of parents during the subsequent pregnancy, (3) the replacement or vulnerable child syndromes, and (4) parenting issues with the subsequent live-born child. These themes will be discussed in detail as they relate to a pregnancy following a perinatal loss.

Grief Process and Effect on Subsequent Pregnancy

Several studies have explored the concern that becoming pregnant and having another child too soon after a perinatal loss may result in unresolved grief issues. In addition, unresolved grief could potentially play a role in ineffective parenting for the subsequent child. Some women who became pregnant within 5–6 months after any type of loss exhibited inappropriate grief responses (Ney, Fung, Wickett, & Beaman-Dodd, 1994; Robertson & Kavanaugh, 1998).

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Davis, Stewart, and Harmon (1989) examined the decision to postpone subsequent pregnancies as it related to the doctor's advice. The Perinatal Loss Interview was administered to 24 mothers who were raising a child following a previous perinatal loss. The results of this retrospective study showed that mothers were dissatisfied with physicians' advice regarding postponement of a subsequent pregnancy. The mothers felt that the timing of the subsequent pregnancy was a personal decision influenced by many individualized factors. Such factors included maternal age, spacing of children, fear of infertility, feelings of readiness, and stage of grieving the previous loss.

Another descriptive study by de Montigny, Beaudet, and Dumas (1999) found that parents are offered a great deal of contradictory advice regarding when to become pregnant again. The researchers corroborated that parents want to be presented with the facts to permit an informed decision, ultimately leaving the decision itself up to the parents.

A classic descriptive study by Theut and associates (1989) utilized the Perinatal Bereavement Scale, a tool developed to contrast specific pregnancy-related anxiety with generalized measures of depression and anxiety. A sample of 25 pregnant couples who had experienced a previous loss (stillbirth or miscarriage) were interviewed during the eighth month of pregnancy. The research showed that any perinatal loss, whether early or late, was associated with specific rather than generalized anxiety during the next pregnancy. Parents in the late-loss group grieved more with the potential for unresolved grief issues than parents in the early-loss group; mothers grieved more than the fathers; and parents grieved less once the birth of a viable live child occurred than during the pregnancy itself (Theut et al., 1989).

Other investigators also have found that grief increases in relation to the length of gestation of the perinatal loss and decreases in intensity with the subsequent pregnancy and birth (Janssen, Cuisinier, Hoogduin, & de Graauw, 1996; Robertson & Kavanaugh, 1998). A prospective, longitudinal study by Nikcevic, Tunkel, Kuczmierczyk, and Nicolaides (1999) found that the identification of the exact medical reason for the previous miscarriage or loss (usually a fetal chromosomal abnormality) reduced the intensity of grieving and feelings of self-blame and responsibility, but was not significant for decreasing the concern over future pregnancies.

Coping Mechanisms of Parents during the Subsequent Pregnancy

The vast majority of the research literature regarding perinatal loss and subsequent pregnancies has focused on anxiety and depression. A variety of other parental behaviors and coping mechanisms have also been documented. The anxiety experienced by mothers during a subsequent pregnancy has been noted consistently by multiple investigators in the literature. Studies by Arm-

strong and Hutti (1998), Cote-Arsenault and Mahlangu, (1999), Franche and Mikail (1999), and Janssen et al. (1996) found that women with a history of a previous reproductive loss demonstrated more symptoms of depression and pregnancy-related anxiety than women without a history of loss.

Anxiety was measured using the Pregnancy Outcome Questionnaire in two different studies (Armstrong & Hutti, 1998; Franche & Mikail, 1999). Armstrong and Hutti (1998) utilized a descriptive, comparative design to examine 31 expectant mothers who were in their second and third trimester and had experienced either an early or late loss. A descriptive study by Cote-Arsenault and Mahlangu (1999) utilized a questionnaire format for 72 women in the second trimester with a history of one or more losses. This study expanded on the issue of anxiety. Although anxiety was the major finding common to all three studies, other coping mechanisms were evident. These included guarded emotions, marking off or benchmarking the progress of the pregnancy, and individual coping mechanisms such as avoidance behaviors (avoiding foods, caffeine, exercise, alcohol, and additional information) or, on the other hand, seeking-out behaviors (identifying all resources of additional information regarding pregnancy).

Franche and Mikail (1999) found that, in addition to increased pregnancy-related anxiety, significantly more depressive symptoms existed in couples (both mother and father) who had experienced a previous loss than in those couples who had never had a loss. These depressive symptoms manifested themselves in self-criticism and interpersonal dependency on others where women tended to have more depressive symptoms than their partners. Intensified anxiety surrounding routine prenatal tests and the anniversary of the previous loss are also well documented in the literature (Armstrong & Hutti, 1998; Cote-Arsenault & Mahlangu, 1999; Estok & Lehman, 1983; Robertson & Kavanaugh, 1998).

Replacement Child Syndrome/Vulnerable Child Syndrome

Replacement child syndrome is characterized by parents using another pregnancy and subsequent child as a substitution for the child that they previously lost (Robertson & Kavanaugh, 1998). The term *replacement child syndrome* was coined from case reports of families who were raising children following the unexpected death of an older child. A variant of this syndrome is the *vulnerable child syndrome*, which is characterized by parents being overprotective of the subsequent child (Davis et al., 1989). Very little research related to perinatal loss has been completed regarding these topics, although they have been mentioned in various descriptive and qualitative perinatal-loss studies (Davis et al., 1989; Robertson & Kavanaugh, 1998). The parents of children used as a replacement have been shown to be dealing with unresolved grief issues (Davis et al., 1989) and are overprotective with unrealistic expectations of the infant due to the fear of forgetting their previous loss and/or the fear of losing this child (Ney et al., 1994). The child is often expected to be just like the deceased child and may never live up to that image or develop her/his own identity (Robertson & Kavanaugh, 1998). The vulnerable child syndrome is a concept used to describe a distortion of maternal perceptions of the child that leads to overprotectiveness similar to the replacement child syndrome, but results in difficulty with separation and individualization as the child grows.

Davis et al. (1989) found that, regardless of the timing of the subsequent pregnancy following a loss, mothers in their descriptive study talked freely about feelings of replacement and overprotectiveness during the interview process. It is unclear whether these feelings are normal maternal feelings or represent a maladaptive grieving process. Over 25 years ago, both of these syndromes were introduced into the literature in the context of death and dying without specifically considering perinatal loss (Robertson & Kavanaugh, 1998). Therefore, additional research regarding these syndromes must be performed to validate how applicable these concepts are to perinatal loss and subsequent pregnancies.

Parenting Issues with Subsequent Pregnancies and Live-Born Children

Parenting children after a previous perinatal loss and the effects of perinatal loss on parenting behaviors are not completely documented or understood. Studies of the effects of perinatal loss on parenting behaviors have only touched the surface and much more research is needed. To understand this experience, researchers speculate that unresolved grief issues, past episodes of depression and anxiety, and the replacement or vulnerable child syn-

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drome lend themselves to ineffective parenting skills and patterns (Davis et al., 1989). Again, the concepts of replacement or vulnerable child syndromes and, in particular, the development of ineffective parenting skills are speculation and receive limited evidence in the research literature.

Other studies have documented that both parents showed very little pleasure when finding out about being pregnant following a previous perinatal loss. At times, they postponed confirming the pregnancy and seeking medical prenatal care while waiting until after the date of a previous early loss both to confirm the pregnancy and to announce the event to family and friends (Ney et al., 1994). According to Ney et al. (1994) and Robertson and Kavanaugh (1998) (based on an unlocated secondary source by Phipps), it was asserted but not well substantiated that in subsequent pregnancies less emotional attachment occurred during the pregnancy, followed by overprotective behaviors after the birth (e.g., monitoring the sleeping baby's breathing and isolating the baby from family or friends in order to prevent illness). Another study by Armstrong and Hutti (1998) supported these findings by Ney et al. (1994) and examined the relationship between anxiety and prenatal attachment using the Pregnancy Outcome Questionnaire and the Prenatal Attachment Inventory. This study of 31 women who had experienced both early and late losses found that women with a previous late perinatal loss had a higher level of pregnancy-related anxiety and decreased prenatal attachment with the current pregnancy (Armstrong & Hutti, 1998). It remains unclear whether the decrease in prenatal attachment is simply a protective tool used by some mothers as a healthy coping strategy or a maladaptive coping mechanism.

Other investigators have described various other parenting attitudes and behaviors toward children born after a perinatal loss. Hunfeld, Agterberg, Wladimiroff, and Passchier (1996) performed a case-control study to examine quality of life and anxiety during pregnancies after a late perinatal loss. Fifty women with and without a previous loss due to congenital anomalies were compared for quality of life and anxiety during their pregnancy before and after the second trimester ultrasound. An increase in pregnancy-related anxiety along with a lower quality of life (focusing on feelings of social isolation, negative emotional reactions, and pain) were experienced by the women who had dealt with a late pregnancy loss.

A follow-up case study by Hunfeld, Taselaar-Kloos, Agterberg, Wladimiroff, and Passchier (1997) expanded on this previous work and examined trait anxiety, negative emotions and maternal adaptation to an infant born following a late pregnancy loss. Hunfeld and associates compared psychologic distress, depression, anxiety, and mother-infant adaptation in 27 women who had a history of a late perinatal loss due to congenital anomalies with that of 29 postpartum women without a history of loss. Data was collected at 4 and 16 weeks postpartum using several structured tools including the Spielberger State-Trait Inventory, Neonatal Perception Inventory, and the General Health Questionnaire. Results of this study demonstrated that at 4 weeks postpartum women with a history of perinatal loss were significantly more anxious and depressed and identified more problems or negative emotions with their infant in relation to sleeping, crying, eating, and settling into a regular routine. At 16 weeks postpartum, these differences were not apparent; however, mothers with a history of loss continued to view their infants as being less ideal than did the group of women without a history of loss. The potential for inadequate or ineffective mother-infant relationships, adaptation, and bonding are of major concern. These preliminary results on potential ineffective parenting techniques indicate that more rigorous research must be undertaken to examine these issues.

Implications for Research Practice

The four recurring themes found in the literature lend credibility and support to the necessity for the health care system to address these issues with women dealing with an immediate pregnancy loss and especially as they become pregnant again. Assistance may be needed to deal with the subsequent unresolved feelings and turmoil associated with a previous loss. To further advance the knowledge regarding the impact of a perinatal loss on

a subsequent pregnancy, health care professionals must conduct research and make appropriate evidence-based practice recommendations.

Research Opportunities

Much of the perinatal loss literature focuses on various aspects of the grieving process, while very little has been published related to pregnancy following a perinatal loss. Within the perinatal loss literature, the vast majority of the research focuses primarily on psychological traits such as depression and anxiety, which is consistently documented. Larger longitudinal and prospective studies regarding pregnancy issues subsequent to a perinatal loss could further support the previous literature (Robertson & Kavanaugh, 1998). The concepts of the replacement and vulnerable child syndromes were developed from case reports with a population of parents mourning the loss of an older child. These concepts must be further researched as they apply to perinatal loss to determine whether they accurately portray parenting behaviors following the death of an unborn child or a child shortly after birth. Additional research needs to be conducted to identify potential parents who are at risk for developing these syndromes (Armstrong & Hutti, 1998; Davis et al., 1989; Robertson & Kavanaugh, 1998).

Future research studies should also focus on parenting styles and behaviors for children born subsequent to a perinatal loss. The majority of the research thus far focuses on the newborn and infant period. Additional information is needed regarding long-term effects of alternative parenting styles, which may be harmful not only to the mother-infant relationship but also to the father, future siblings, and the child as an adult (Conway, 1995; Robertson & Kavanaugh, 1998). Further research must also look at attachment theories and what effects a perinatal loss and potential unresolved grief may have on subsequent pregnancies. Another issue would be the time period that these negative emotions, depression, anxiety, and fear of losing another child persist following the birth of a healthy child (Theut et al., 1989). Additional research is necessary to determine how a pregnancy following a perinatal loss is affected by lower socioeconomic status, alternative family lifestyles, and the birth of a child needing long-term hospitalization in the neonatal intensive care unit for a serious medical condition (Robertson & Kavanaugh, 1998; Theut et al., 1989). Who is coping well? Are there factors such as religion, marital relationship, cultural background, etc. that mitigate the impact of perinatal loss?

Practice Recommendations

Many studies advocate increased awareness of the issues with which pregnant mothers may be dealing after a previous perinatal loss. These studies also address the provision of additional support by health care providers. Hunfeld et al. (1997) discussed the importance of recommending more frequent prenatal visits for women with high anxiety levels following a previous late-pregnancy loss due to the potential for ineffective mother-infant adaptation and attachment. If health care providers proactively address the effect of the previous loss and explore the mothers' thoughts and feelings, they can facilitate a positive adaptation to the subsequent pregnancy and to parenthood (Robertson & Kavanaugh, 1998).

Once the pregnancy is diagnosed, prenatal care should include not only a thorough obstetrical history to determine the occurrence of previous perinatal loss or other problems, but also an in-depth exploration of what the loss meant to the parents and how it may affect their current pregnancy. This offers reassurance that the perinatal loss was real and assists in building a supportive, trusting relationship that will become crucial if and when pregnancy-related anxiety develops (Armstrong & Hutti, 1998; Robertson & Kavanaugh, 1998). Many of the studies document the importance of recognizing milestones or critical points in the pregnancy and the necessity of longer scheduled appointments at these times to allow for open discussion of emotions and concerns (Cote-Arsenault & Mahlangu, 1999; Robertson & Kavanaugh, 1998). Charts could be flagged by the health care providers to remind them of the need for a prenatal visit or phone call during these crucial periods. For others, more frequent scheduled, routine prenatal visits and additional testing (e.g., ultrasounds, nonstress tests, or fetal monitoring) within the constraints of health insurance mandates may be necessary to alleviate anxiety (Armstrong & Hutti, 1998). Robertson and Kavanaugh (1998) further recommend that the staff responsible for performing these routine prenatal tests be made aware of the parents' previous history and heightened anxiety levels. Cote-Arsenault and Mahlangu (1999) discussed

the importance of understanding some of the protective mechanisms that women have utilized when pregnant following a loss, such as avoiding attachment or seeking out all resources and literature regarding pregnancy in an effort to compensate for the loss. Communication of physical findings and the stage of pregnancy in a positive manner may be key factors upon which to focus at each prenatal visit, thus providing reassurance that the pregnancy is progressing in a normal fashion (Cote-Arsenault & Mahlangu, 1999; Robertson & Kavanaugh, 1998).

Several sources have identified the necessity for special considerations to be provided for parents experiencing a pregnancy following a perinatal loss. These include special childbirth preparation classes and the potential benefits of attending a support group comprised of parents dealing with a pregnancy subsequent to a perinatal loss (Armstrong & Hutti, 1998; Robertson & Kavanaugh, 1998). Most women are urged, especially with the first child, to attend childbirth preparation classes, which generally spend a total of 5 minutes or less on possible tragic outcomes with delivery. Estok and Lehman (1983) found that childbirth educators do not routinely question the class about past obstetric complications and, therefore, are unaware of parents who are dealing with loss issues. Childbirth educators are in a unique position to provide the anticipatory guidance needed to assist a couple experiencing a pregnancy following a previous perinatal loss. This guidance could be particularly useful in reassuring the couple about the impact of milestones and recurring thoughts and fears surrounding the previous loss—feelings that are normal and expected at this time (Armstrong & Hutti, 1998; Estok & Lehman, 1983). Only recently have support groups been formed for parents who are pregnant following a previous perinatal loss. No one would understand better what these couples are living through other than couples who have had a successful pregnancy and who are raising a child following a perinatal loss. These support groups could be expanded to include not only parents, but also health care providers who could assist with reassurance and could deal professionally with the anxiety and hope that any new pregnancy evokes (Armstrong & Hutti, 1998; Robertson & Kavanaugh, 1998).

Childbirth educators are in a unique position to provide the anticipatory guidance needed to assist a couple experiencing a pregnancy following a previous perinatal loss.

Health care providers must take on the challenge to care holistically for women. The loss of any pregnancy is a significant life crisis and can have far-reaching implications for a couple. Women who become pregnant following a perinatal loss have increased psychosocial needs during this pregnancy. In the past 20 years, significant progress has been made in recognizing these increased psychological needs. Health care professionals must continue this quest. They are in a pivotal position to take on this task by positively affecting the related needs of these women and their partners.

Acknowledgment

The author acknowledges the contribution of Deborah Raines, PhD, RN, who assisted in reviewing this paper in a graduate course in the School of Nursing at Virginia Commonwealth University in Richmond, Virginia.

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